Dendritic gates for signal integration with excitability-dependent responsiveness.

AUTHOR(S):

Takigawa-Imamura, Hisako; Motoike, Ikuko N

CITATION:

Takigawa-Imamura, Hisako ...[et al]. Dendritic gates for signal integration with excitability-dependent responsiveness.. Neural networks : the official journal of the International Neural Network Society 2011, 24(10): 1143-1152

ISSUE DATE:

2011-12

URL:

http://hdl.handle.net/2433/150444

Supplemental materials

Supplementary Movie S1 (MOV)

Example of the coincidence detection is shown. The results of 10 different trials were combined in one movie. The first trial corresponds to Fig. 1B, where both channels are stimulated at once. In the second to ninth trial, the right channel is stimulated at 100~800 time steps after the left channel is stimulated (a typical example is shown in Fig. 1D). The last trial corresponds to Fig. 1C, where only the left channel is stimulated.

Supplementary Movie S2 (MOV)

Examples of possible excitation patterns at a fixed dendritic gate. S2A–E correspond to Fig. 4A–E. S2F shows an example of the OR operation. S2G shows an example of the propagation failure on very narrow branches.

Supplementary Movie S3 (MOV)

Example of possible excitation patterns for 10 different aligned dendritic gates corresponding to Fig. 6C.